REMARKS/ARGUMENTS

Reconsideration and allowance of the present application based on the following remarks are respectfully requested. Claims 23 and 35 have been amended. Support for the amendments may be found throughout the specification. No new matter has been added as a consequence of these amendments.

Claims 23-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication 2003/0153787 ("Carpenter") in view of U.S. Patent Publication 2003/0187103 ("Bloom"). Claims 35-41 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Carpenter in view of Bloom, in further view of U.S. Patent 6,780,910 ("Bouvy"). For at least the following reasons, the claims are believed to be patentable over the cited references.

Applicants hereby reiterate and incorporate the arguments presented in the Response filed on April 22, 2011, and maintain that the pending claims are patentable over the cited references for at least the reasons provided below, which address the Examiner's comments asserted in the outstanding Advisory Action.

Danger of Impermissible Hindsight

Applicants are specifically concerned about the hindsight approach that is being applied in combining the references supporting the rejections. In particular, it must be appreciated that the temptation of "[c]ombining prior art references without evidence of such suggest, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability – the essence of hindsight." *See In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

Engaging in such an impermissible hindsight approach is dangerous to the inventive process. Accordingly, to properly assert a combination, it is imperative that the Examiner provide evidence to support not only that one skilled in the art would have some motivation to combine the prior art teachings, but that they also have some motivation to combine the prior art teachings in the manner asserted in the rejections. *See, e.g., In re Kotzab*, 217 F.3d 1365, 1371 (Fed. Cir. 2000) ("Particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination *in the manner claimed*." (emphasis added)); *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir.

1998) ("In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination *in the manner claimed*." (emphasis added)).

No Suggestion or Motivation to Combine

The Examiner asserts that Carpenter and Bloom may be combined as these "are drawn to aqueous systems comprising surfactants" (*see* present Advisory Action comments). As the Supreme Court has explained:

> When there is. . . a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product is not of innovation but of ordinary skill and common sense.
>
> *KSR Intl. Co. v. Teleflex Inc.*, 550 U.S. 398, 402-403 (2007).

There is certainly not a finite number of identified, predictable solutions for one of ordinary skill in the art to consider in the World of aqueous systems comprising surfactants. Consequently, it is clear folly for the Examiner to assert that there is some motivation to combine merely because these references are present in this World.

Carpenter, the primary reference, is directed towards providing thickener compounds in *personal care products*, such as in baby shampoos (*see* Carpenter at paragraph [0001]). In contrast, Bloom is directed towards *latex paint compositions* to provide dry paint films that are more durable and water resistant (*see* Bloom at Abstract). Accordingly, Applicants submit that the Examiner has failed to provide evidence to support the assertion that one skilled in the art would have the required motivation to combine the baby shampoo components of Carpenter with the latex paint compositions of Bloom to develop the resin emulsifying compounds of the pending claims, in the manner that has been claimed.

No Teaching of "On Average at Least 1.2"

Even assuming arguendo that one were to combine Carpenter's baby shampoos with Bloom's latex paints, Applicants submit that neither reference

teaches or suggests compounds having *on average at least 1.2 groups/compound* that are or comprise a hydrocarbyl group *comprising at least two ethylenic double bonds*.

Bloom's "polyunsaturated fatty acid or derivative thereof" is used in the context of a polyunsaturated fatty acid mono-ester of glycols (*see* Bloom at paragraph [0067]). Because Bloom provides only monoesters, Bloom does not – and cannot – provide a compound comprising *more than one* doubly unsaturated acyl residue. How does a mono-ester have the specified average of 1.2 groups per compound? Therefore, Bloom also fails to suggest the "on average *at least 1.2 groups/compound*" limitation of the pending claims.

Applicants submit that Carpenter's discussion that a fatty acid may be optionally included "in molar ratios corresponding to the number of ASA and optional fatty acid residues desired in the product" – is limited to personal care products, such as baby shampoos (*i.e.*, the desired products). There is no suggestion that the desired product is applicable to the field of the present application – *i.e.*, directed towards, *inter alia*, compounds that are effective emulsifiers for resins, such as unsaturated curable alkyd resins, to provide cured films having high hardness and good water resistance, while maintaining good gloss.

Claims Commensurate in Scope with Unexpected Results

Applicants submit that the mixture of compounds prepared in Example 1 ("Inventive Example") falls within the pending claims (*i.e.*, meeting the on average at least 1.2 groups/compound limitation. Specifically, the product of the Inventive Example is derived, in part, from esterification of multiple hydroxyl residues of a sorbitol 40 ethoxylate with linoleic acid. Thus, the mixture of compounds resulting from this esterification has on average at least 1.2 of the R^2 groups per compound comprising a C_4 to C_{21} hydrocarbyl group comprising at least two ethylenic double bonds.

Accordingly, the mixture of compounds of Inventive Example have superior results relative to the comparative mixture of compounds, falling outside the claims, of Example 2 ("Comparative Example"). See Table.

Table

	Comparative Example	Inventive Example
After 4 days drying	975 g	**1225 g**
After 7 days drying	1100 g	**1300 g**
After 14 days drying	1200 g	**1350 g**
After 28 days drying	1275 g	**1450 g**
Gloss value	62%	**60%**

Table note: Comparative Example emulsions, differing from the Inventive Example emulsions, only in the identity of the emulsifier compound used, *i.e.*, the product of Example 2.

As Bouvy fails to cure the above-noted deficiencies of either Carpenter or Bloom, alone or in combination, Applicants submit that the pending claims are patentable over the cited references.

Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited.

Should any issues remain unresolved, the Examiner is encouraged to contact the undersigned attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

Respectfully submitted,

JONES DAY

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